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ABSTRACT OF THE DISCLOSURE

A more efficient solid-state light emitting device in which phosphors excited by radiation produce visible light. The efficiency is increased by, for example, providing a reflector adjacent to the phosphor layer for reflecting at least some of the radiation that passes through the phosphor, back into the phosphor. The reflector may also reflect at least some of the visible light that is emitted by the phosphor toward a designated light output. Alternatively, or in addition to, the lateral edges of the active region of the radiation source can be at least partially surrounded by a visible light emitting phosphor and a reflector. This allows more of the radiation to interact, and thus excite, the phosphor material, making the device more efficient. The reflector also may reduce optical and radiation cross talk between adjacent light emitting devices.

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By: *Kathleen L. Boekley*